

110,024

PATENT



SPECIFICATION

*Application Date, Oct. 5, 1916. No. 14,149/16.*

*Complete Left, Apr. 4, 1917.*

*Complete Accepted, Oct. 5, 1917.*

PROVISIONAL SPECIFICATION.

Bedstead Lifting Trolley.

I, WILLIAM JOHN GOODING, 61, Burlington Road, New Malden, Surrey, Inventor, do hereby declare the nature of this invention to be as follows:—

My invention relates to a bedstead lifting trolley which will enable bedsteads without castor wheels to be easily transferred from one place to another.

- 5 Referring to the drawings,  
Figure 1 shows a longitudinal elevation of a bedstead with trolley underneath.  
Figure 2 shows an end elevation of the same.  
The same letters of reference indicate the same parts in both figures.
- 10  $a$  shows the indiarubber tyred trolley wheels which may revolve independently of each other, and on which the trolley moves.  
 $a^1$  shows the position the wheels take when the bedstead is raised by the trolley.  
 $a^2$  shows the two trolley wheels which are arranged so as to swivel, and thus guide the trolley easily.
- 15  $b$  shows the hinged legs of the trolley.  
 $c$  shows the vertical posts rigidly fixed at the upper end and carrying tee bearings  $d$  at the lower end.  
 $e$  shows the tee supports which carry the rigid shafts  $f$ , on which the trolley wheels  $a$  revolve.
- 20  $g$  shows the operating lever, which when raised to position  $g^1$  draws the wheels  $a$  and  $a^2$  towards each other & thus lifts the bedstead off the ground.  
 $h$  shows the bracket carrying locking pin  $i$  which prevents the operating lever  $g$  falling to its lower position & thus accidentally letting down the bedstead.
- 25  $j$  shows the connecting rods which open & close the trolley legs.  
 $j^1$  shows the position the connecting rods take when the bedstead has been lifted.  
 $k$  shows the lever arm which moves the connecting rods.  
The lever is firmly fixed to the fulcrum shaft  $l$  which has its bearing in the 30 tee bearings  $d$ .  
Thus when the lever arm is moved the motion is transmitted through the shaft  $l$  to the lever arm and connecting rods  $j$  at the opposite side of the trolley.  
This enables both sides of the bedstead to lift the same amount at the same time.
- 35  $m$  shows the cast iron bracket firmly fixed to hinged leg  $b$ .  
 $m^1$  shows the cast iron bracket carrying swivelling trolley wheels.  
The brackets  $m$  and  $m^1$  carry one end of the connecting rod  $j$ .

[Price 6d.]

The other end of connecting rod *j* is carried by one end of the lever arm *k*.  
*n* shows the diagonal bracings between the hinged legs.

These bracings tend to make the trolley as a whole more rigid.  
*o* shows the tee bearings and angle cleats which are attached to the upper ends of the hinged legs *b*.

*p* shows the wooden table, to the underside of which is fixed the mechanical part of the trolley and on the upper side the guides *q* which hold the bedstead on the trolley are fixed.

The method of working the trolley is as follows.  
 The operating lever *g* is lowered to its horizontal position, the wooden table 10 is now at its lowest point.

The trolley is moved to its correct position under the bedstead and the operating lever *g* raised & locked in its vertical position. When the operating lever is locked the trolley is safe & the bedstead whose feet are now off the ground, 15 can be moved to any desired position.

To withdraw the trolley the bedstead feet are first lowered to the ground when the trolley may be withdrawn.

Dated the 30th day of September, 1916.

WILLIAM JOHN GOODING.

COMPLETE SPECIFICATION. 20

Bedstead Lifting Trolley.

I, WILLIAM JOHN GOODING, 61, Burlington Road, New Malden, Surrey, Inventor, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in 25 and by the following statement:—

This invention relates to an apparatus for moving bedsteads from one place to another without taking them to pieces or removing the occupant from the bed.

The apparatus is a frame of wood or gas tubing constructed in the shape of a trolley held together by tie rods and moved upon four rubber tyred wheels. 30 That part which comes in contact with the bedstead is constructed of timber battens firmly secured to the frame and with felt pads.

Referring to the Figures 1 and 2 filed with the Provisional Specification, *a*, *a*, show two of the four rubber tyred wheels upon which the trolley moves.

These wheels are mounted on the shaft *f* whose bearings are at *e* and *e*. 35 *a*, *a* are the remaining two wheels and these are made so as to swivel independently of each other.

The wheels are attached to the bottom corners of the movable side frames *b*, *b*. These frames are hinged at their top corners to the timber battens *p*.

*c*, *c* show the vertical stays, which at their upper ends are rigidly fixed to 40 the timber batten *p*, and at their lower ends are attached bearings *d*, *d* for the rocking shaft *l*.

This rocking shaft is actuated by the operating lever *g*.

When the lever *g* is in an upright position *g*<sup>1</sup>, the bracket *h*, along with the pin *i*, is designed to hold the lever in position.

*j*, *j* show the connecting rods, which are hinged to the frames *b*, *b* and also to the double lever *k*.

The lever *k* is keyed to the rocking shaft *l*.

*m*, *m*<sup>1</sup> are the connections between the side frames *b* and the connecting rods *j*. 50

*n, n* are light diagonal stays, to strengthen the side frames.  
*o, o*, show the hinges and fastenings between the upper ends of the side frames and the timber batten *p*.

5 *q, q* show the projections on the top of the timber batten, which prevent the bedstead slipping off the trolley when same is in use.

The method of working the trolley is as follows:—

The operating lever *y* is assumed to be in a horizontal position.

The trolley is wheeled underneath the bedstead, at approximately the centre of the bedstead longitudinally.

10 The operating lever is then raised to a vertical position & locked in position by means of the pin *i*.

This operation brings the two side frames towards each other, & thus raises the bedstead a few inches clear of the ground.

The bedstead may now be moved to a new position.

15 When it is necessary to withdraw the trolley, the operating lever is lowered to its original horizontal position, which releases the trolley from the bedstead. The trolley may now be withdrawn.

Having now particularaly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that 20 what I claim is:—

A bedstead lifting trolley consisting of two hinged side frames, running on wheels at their lower corners, and hinged at their upper corners to lateral timber battens, the members of these frames being adapted to be brought towards each other or thrust apart by means of the levers and connecting rods 25 substantially as described.

Dated the 17th day of September, 1917.

WILLIAM JOHN GOODING.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1917.

*[This Drawing is a reproduction of the Original on a reduced scale.]*

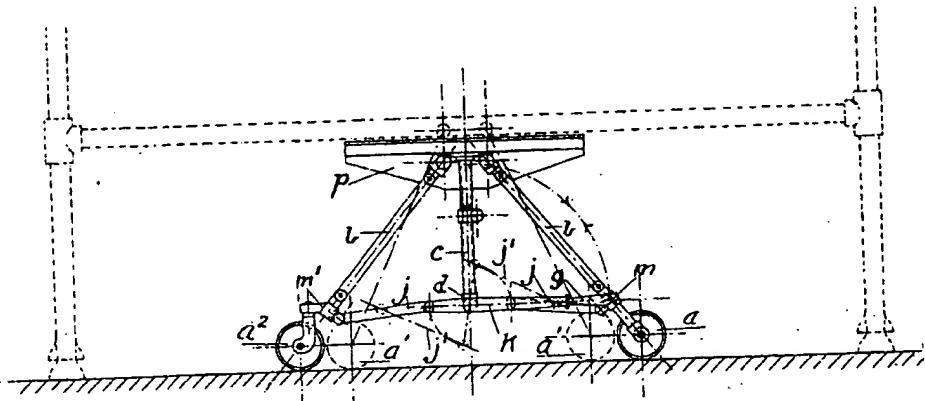


FIG 1.

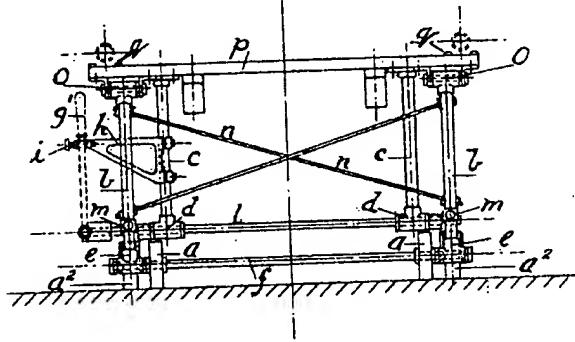


FIG 2